

Appl. No. 10/038,756
Amdt. dated September 24, 2003
Reply to Office Action of June 24, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A carbohydrate foam comprising:
 - (a) a matrix comprising a regenerated carbohydrate material produced from an aqueous carbohydrate composition comprising a water-insoluble carbohydrate, wherein the carbohydrate is at least partially dissolved in an aqueous solution capable of at least partially dissolving the carbohydrate; and
 - (b) a plurality of pores dispersed within the matrix, wherein the pores are produced by introduction of a gas into the aqueous carbohydrate composition prior to regeneration.
2. (Original) The carbohydrate foam of claim 1, wherein the carbohydrate is selected from cellulose or chitin.
3. (Original) The carbohydrate foam of claim 1, wherein the carbohydrate comprises cellulose and the cellulose is selected from mixed office waste or fluffed pulp.
4. (Original) The carbohydrate foam of claim 1, wherein a plurality of the pores are open-celled.
5. (Original) An absorbent product comprising a porous absorbent material wherein the porous absorbent material comprises the carbohydrate foam of claim 1.
6. (Currently Amended) The absorbent product of claim [63]5, wherein the product is selected from diapers, sanitary napkins, sponges, bandages, facial tissue, or paper towels.

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7. (Original) The carbohydrate foam of claim 1, wherein the foam is in the form of a sheet.

8. (Original) The carbohydrate foam sheet of claim 7, wherein the pores on the surface of the sheet are substantially closed-celled and the pores on the interior of the sheet are substantially open-celled.

9. (Original) A facial tissue comprising the carbohydrate foam sheet of claim 7.

10. (Original) A paper towel comprising the carbohydrate foam sheet of claim 7.

11. (Original) The carbohydrate foam of claim 1, wherein the aqueous solution is an aqueous solution of ZnCl_2 .

12. (Original) The carbohydrate foam of claim 11, wherein the aqueous solution is from about 60% to about 75% ZnCl_2 in water.

13. (Original) The carbohydrate foam of claim 11, wherein the aqueous solution is from about 65% to about 70% ZnCl_2 in water.

14. (Original) The carbohydrate foam of claim 1, wherein the aqueous carbohydrate solution further comprises a salt.

15. (Original) The carbohydrate foam of claim 14, wherein the salt is CaCl_2 .

16. (Original) The carbohydrate foam of claim 1, wherein the aqueous carbohydrate solution further comprises a surfactant.

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17. (Original) The carbohydrate foam of claim 1, wherein the gas is selected from air, carbon dioxide, nitrogen, helium or argon.

18. (Original) The carbohydrate foam of claim 1, wherein a blowing agent is used to introduce gas with the aqueous carbohydrate solution.

19. (Original) The carbohydrate foam of claim 18, wherein the blowing agent is selected from the group consisting of carbon dioxide, nitrogen or ammonium chloride.

20. (Original) The carbohydrate foam of claim 1, wherein said foam is regenerated with a regenerating agent.

21. (Original) The carbohydrate foam of claim 20, wherein the regenerating agent is water.

22. (Original) The carbohydrate foam of claim 20, wherein the aqueous solution comprises an aqueous solution of zinc chloride, and wherein excess zinc chloride is removed prior to regeneration.

23. (Original) The carbohydrate foam of claim 22, wherein the removal of excess zinc chloride comprises contacting the foam with an organic solvent.

24. (Original) The carbohydrate foam of claim 23, wherein the organic solvent is selected from ethanol, methanol, or isopropanol.

25. (Original) The carbohydrate foam of claim 1, wherein the aqueous solution comprises at least two carbohydrates.

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26. (Original) The carbohydrate foam of claim 25, wherein the carbohydrates comprise cellulose and chitin.

27. (Original) A personal care product comprising the carbohydrate foam of claim 1.

28. (Original) The personal care product of claim 27, wherein the personal care product is a diaper.

29. (Original) The personal care product of claim 27, wherein the personal care product is a feminine care article.